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Date: October 18, 2006	Phone Number	Fax Number
To: Examiner Bilgrami		(571) 273-8300
From: Kevin J. Zilka		

Docket No.: NAIIP314/01.166.01

App. No: 10/072,708

Total Number of Pages Being Transmitted, Including Cover Sheet: 20

Message:

Please deliver to Examiner Bilgrami.

Thank you,

Kevin J. Zilka

☐ Original to follow Via Regular Mail ☒ Original will Not be Sent ☐ Original will follow Via Overights Courier

\*\*\*\*\*  
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October 18, 2006



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/095,146	03/30/2005	Anton C. Rothwell	NA11P022A/01.106.02	3421
28875	7590	07/18/2006	EXAMINER	
Zilka-Kotab, PC P.O. BOX 721120 SAN JOSE, CA 95172-1120			BAROT, BHARAT	
			ART UNIT	PAPER NUMBER
			2155	

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

11/095,146

Applicant(s)

ROTHWELL ET AL.

Examiner

Bharat N. Barot

Art Unit

2155

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- The MAILING DATE of this communication appears on the cover sheet with the correspondence address -  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-23 is/are rejected.
- 7) ☒ Claim(s) 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

Application/Control Number: 11/095,146

Art Unit: 2155

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OCT 18 2006

**DETAILED ACTION****Claim Rejections - 35 USC § 103(a)**

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1, 4-6, 8-12, 14-18, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horvitz et al (U.S. Patent No. 6,161,130) in view of Kirsch et al (U.S. Patent No. 6,772,196).

Horvitz teaches the invention substantially as claimed including a utilizing a probabilistic classifier to automatically detect junk/SPAM mail (see abstract).

3. As to claim 1, Horvitz teaches a method for detecting unwanted messages, comprising: receiving an electronic mail message (figures 1-3; column 9 lines 19-25, Horvitz discloses receiving an email message for analysis); decomposing text in the electronic mail message (column 11 lines 55-60, Horvitz discloses breaking the

Application/Control Number: 11/095,146

Page 3

Art Unit: 2155

message into units/tokens); gathering statistics associated with the text using a classifier (column 9 lines 50-55; column 10 lines 10-15, Horvitz discloses that a feature vector is extracted and associated with the message); and analyzing the statistics for determining whether the electronic mail message is an unwanted message (column 9 lines 55-60; column 12 lines 45-50, Horvitz discloses that the classifier is trained to recognize SPAM) Wherein the statistics gathered using the statistical analyzer includes results of a message header field analysis (columns 9-10).

Horvitz fails to teach the limitation wherein the statistics gathered using the statistical analyzer include results of an analysis of a uniform resource locator (URL) in the electronic mail message text and analysis of e-mail addresses in the electronic mail message text.

Kirsch teaches an electronic mail filtering system and method (see abstract). Kirsch teaches analysis of a uniform resource locator (URL) in the electronic mail message text and analysis of e-mail addresses in the electronic mail message text (columns 9-10, Kirsch discloses analyzing the mail message for presence of URLs and certain predefined email addresses within the text ).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Horvitz in view of Kirsch so that results analysis include the presence of URL and email addresses in the message text. One would be motivated to do so to filter out junk mail with typical characteristics that include certain URLs and email addresses.

Horvitz does not explicitly teach the limitation of a statistical analyzer. Horvitz does teach that a classifier module is used to output a probabilistic confidence level for

Application/Control Number: 11/095,146

Page 4

Art Unit: 2155

incoming messages based on the extracted feature vector (column 10 lines 10-15; columns 13-14).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Horvitz by specifying the classifier module as a statistics analyzer since the same functionality of classifying e-mail messages is achieved.

4. As to claim 4, Horvitz does not explicitly teach the claimed limitation wherein the statistics gathered using the classifier include a number of uniform resource locators (URLs) in the text.

Horvitz does teach that the feature detector detects whether the message includes handcrafted feature (column 11 lines 20-65).

Kirsch teaches an electronic mail filtering system and method (see abstract). Kirsch teaches analysis of a uniform resource locator (URL) in the electronic mail message text and analysis of e-mail addresses in the electronic mail message text (columns 9-10, Kirsch discloses analyzing the mail message for presence of URLs and certain predefined email addresses within the text).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Horvitz in view of Kirsch so that results analysis include the presence of URLs in the message text. One would be motivated to do so to filter out junk mail with typical characteristics that include certain URLs.

Application/Control Number: 11/095,146  
Art Unit: 2155

Page 5

5. As to claim 5, Horvitz does not explicitly teach the claimed limitation wherein the statistics gathered using the classifier include at least one telephone number in the text. Horvitz does teach that the feature detector detects whether the message includes handcrafted feature (column 11 lines 20-65).

Kirsch teaches an electronic mail filtering system and method (see abstract). Kirsch teaches analysis of a telephone number in the electronic mail message text (column 9, line 25, Kirsch discloses analyzing the mail message for presence of telephone numbers within the text).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Horvitz in view of Kirsch so that results analysis include the presence of telephone numbers in the message text. One would be motivated to do so to filter out junk mail with typical characteristics that include certain telephone numbers.

6. As to claim 6, Horvitz does not explicitly teach the claimed limitation, wherein the statistics gathered using the classifier include results of an analysis of character type. Horvitz does teach that the feature detector detects whether the message includes handcrafted feature (column 11 lines 20-65).

Kirsch teaches an electronic mail filtering system and method (see abstract). Kirsch teaches analysis of a character type in the electronic mail message text (column 9 lines 1-50, Kirsch discloses analyzing the character types of characters within the email text). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Horvitz in view of Kirsch so that results analysis include the presence of

Application/Control Number: 11/095,146  
Art Unit: 2155

Page 6

certain character types in the message text. One would be motivated to do so to filter out junk mail with typical characteristics that include certain character types indicative of SPAM.

7. As to claim 8, Horvitz teaches the statistics are placed in a results table, wherein entries in the table are passed as inputs to a neural network engine (column 15 lines 10-20).

8. As to claim 9, Horvitz teaches the statistics are sent to a neural network engine, wherein the neural network engine compares the statistics to predetermined weights for determining whether the electronic mail message is an unwanted message (column 15 lines 55-65).

9. As to claim 10, Horvitz teaches the method as recited in claim 12, wherein the neural network engine is taught to recognize unwanted messages (columns 14-15, Horvitz discloses that the classifier is trained to recognize SPAM).

10. As to claim 11, Horvitz teaches the examples are provided to the neural network engine, wherein the examples are of wanted messages and unwanted messages, and each of the examples is associated with a desired output (columns 13-16).



Application/Control Number: 11/095,146

Page 7

Art Unit: 2155

11. As to claim 12, Horvitz teaches the each of the examples are processed with statistics by the neural network engine for generating weights for the statistics, wherein each of the weights is used to denote wanted and unwanted messages (column 15 lines 45-65).
12. As to claim 14, Horvitz teaches the logic associated with the neural network engine is updated based on the processing by the neural network engine (columns 16-18).
13. As to claim 15, Horvitz teaches the neural network engine is updated to recognize an unwanted message, the message is identified as an unwanted message, the features of the message that make the message unwanted are identified, and the identified features are stored and used by the neural network to identify subsequent unwanted messages (columns 21-22).
14. As to claim 16, Horvitz teaches the neural network engine analyzes previous user input for determining whether the message is unwanted (column 15 lines 55-65).
15. Claims 17-18 and 23 do not teach or define any new limitations above claims 1, 4-6, 8-12, and 14-18 and therefore are rejected for similar reasons.

Application/Control Number: 11/095,146

Page 8

Art Unit: 2155

16. Claims 2-3, 7, 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horvitz et al (U.S. Patent No. 6,161,130) in view of Kirsch et al (U.S. Patent No. 6,772,196) as applied to claim 1 above, and further in view of Stockwell et al (U.S. Patent No. 6,144,934).

Horvitz teaches the invention substantially as claimed including a utilizing a probabilistic classifier to automatically detect junk/SPAM mail (see abstract).

17. As to claim 2, Horvitz teaches the statistics gathered using the classifier module include a number of words capitalized (column 9 lines 20-50, Horvitz discloses that words capitalized can be identified and accounted for in a message).

Horvitz and Kirsch do not explicitly teach the claimed limitation of ratio of words capitalized to a total number of words. Horvitz discloses that various features in email are identified indicative of SPAM that include whether a predetermined word is capitalized (column 9 lines 20-50).

Stockwell teaches a binary filter using pattern recognition used to filter unwanted messages (see abstract). Stockwell teaches the limitation of analyzing ratio of words capitalized to a total number of words (column 6 table 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Horvitz and Kirsch in view of Stockwell by specifying analysis of ratio of the number of capitalized words to total number of words to detect SPAM. One would be motivated to do so since the ratio of capitalized words to total number of words represents SPAM e-mail characteristics/features.

Application/Control Number: 11/095,146  
Art Unit: 2155

Page 9

18. As to claim 3, Horvitz and Kirsch fail to teach the limitation wherein the statistics gathered using the classifier module include punctuation to word ratio. Horvitz discloses that various features in email are identified indicative of SPAM that include whether a text includes a series of punctuation marks (column 9 lines 20-50).

Stockwell teaches a binary filter using pattern recognition used to filter unwanted messages (see abstract). Stockwell teaches the limitation of analyzing ratio of punctuation to word (column 6 table 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Horvitz and Kirsch in view of Stockwell by specifying analysis of ratio of punctuation to word to detect SPAM. One would be motivated to do so since the ratio of punctuation to word represent SPAM e-mail characteristics/features.

19. Claims 7 and 19-22 do not teach or define any new limitations above claims 2-3 and therefore are rejected for similar reasons.

#### Claim Objection

20. Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Application/Control Number: 11/095,148  
Art Unit: 2155

Page 10

### Non-Statutory Double Patenting

21. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

### Anticipation Rejection

22. Claims 1-13, 22, and 31 of US Patent Number 7,016,939 contains every element of claims 1-19 and 23 of the instant application and as such anticipates claims 1-19 and 23 of the instant application.

"A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or anticipated by, the earlier claim. *In re Longi*, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); *In re Berg*, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (Affirming a holding of obviousness-type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus). " *ELI LILLY AND COMPANY v BARR LABORATORIES, INC.*, United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001).

23. Claims 1-19 and 23 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-13, 22, and 31 of prior U.S. Patent No. 7,016,939 since the claim, if allowed, would improperly extend the "right to exclude" already granted in the patent. This is a double patenting rejection.

Application/Control Number: 11/095,146  
Art Unit: 2155

Page 11

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

The claimed invention in the instant application (claims 1-19 and 23) is same as the claimed invention in the patent (claims 1-13, 22, and 31 of U. S. Patent No. 7,016,939) by rearranging and deleting the limitations (the functions of a neural network engine) such as a neural network engine. No new invention or new improvement is being claimed in the instant application (claims 1-19 and 23).

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application, which matured into a patent. [Based on 8-38] See also MPEP § 804.

24. Claims 20-22 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 31 of U.S. Patent No. 7,016,939 in view of Stockwell et al (U.S. Patent No. 6,144,934).

Although the conflicting claims are not identical, they are not patentably distinct from each other because the patented claim 31 does not claimed or disclosed that the statistical analyzer include a specific number of a ratio of words capitalized to total number of words and a punctuation to word ratio, but Stockwell teaches the limitation of analyzing ratio of words capitalized to a total number of words (column 6 table 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the patented claim 31 in view of Stockwell by specifying analysis of ratio of the

Application/Control Number: 11/095,146  
Art Unit: 2155

Page 12

number of capitalized words to total number of words to detect SPAM. One would be motivated to do so since the ratio of capitalized words to total number of words represents SPAM e-mail characteristics/features.

**Contact Information**

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bharat Barot** whose Telephone Number is (571) 272-3979. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM. Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number (571) 273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Saleh Najjar**, can be reached at (571) 272-4006.

Patent Examiner Bharat Barot

Art Unit 2155

July 10, 2006

*Bharat Barot*  
BHARAT BAROT  
PRIMARY EXAMINER